

SEQUENCE LISTING

<110> Olivera, Baldomero M.
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<120> Uses of Alpha-Conotoxin Peptides

<130> 2314-278

<150> US 09/897,465
 <151> 2001-07-03

<150> US 09/219,446
 <151> 1998-12-23

<150> US 60/080,588
 <151> 1998-04-03

<150> US 60/070,153
 <151> 1997-12-31

<160> 13

<170> PatentIn Ver. 2.0

<210> 1
 <211> 17
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 <213> Artificial Sequence

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 <223> Description of Artificial Sequence:generic
 alpha-conotoxin sequence

<220>
 <221> PEPTIDE
 <222> (1)..(6)
 <223> Xaa at residue 1 is des-Xaa, Tyr, mono-iodo-Tyr or
 di-iodo-Tyr; Xaa at residue 2 is any amino acid;
 Xaa at residue 5 is any amino acid; Xaa at residue
 6 is any amino acid.

<220>
 <221> PEPTIDE
 <222> (8)..(12)
 <223> Xaa at residues 8, 10, 11 and 12 may be any amino
 acid; Xaa at residues 13, 14, 15 and 16 may be
 des-Xaa or any amino acid.

<400> 1
 Xaa Xaa Cys Cys Xaa Xaa Pro Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa
 1 5 10 15
 Cys

<210> 2
 <211> 16
 <212> PRT

<213> *Conus magus*

<400> 2

Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu His Ser Asn Leu Cys
1 5 10 15

<210> 3

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Tyr derivative
of *C. magus* MII

<400> 3

Tyr Gly Cys Cys Ser Asn Pro Val Cys His Leu Glu His Ser Asn Leu
1 5 10 15

Cys

<210> 4

<211> 16

<212> PRT

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<223> Description of Artificial Sequence: FAT derivative
of *C. magus* MII

<400> 4

Gly Cys Cys Ser Asn Pro Val Cys Phe Ala Thr His Ser Asn Leu Cys
1 5 10 15

<210> 5

<211> 16

<212> PRT

<213> *Conus aulicus*

<400> 5

Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Ser Asp Tyr Cys
1 5 10 15

<210> 6

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Tyr derivative
of *C. aulicus* AuIA

<400> 6

Tyr Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Ser Asp Tyr
1 5 10 15

Cys

<210> 7
 <211> 15
 <212> PRT
 <213> *Conus aulicus*

<400> 7
 Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Ser Asp Cys
 1 5 10 15

<210> 8
 <211> 16
 <212> PRT
 <213> *Conus aulicus*

<400> 8
 Gly Cys Cys Ser Tyr Pro Pro Cys Phe Ala Thr Asn Ser Gly Tyr Cys
 1 5 10 15

<210> 9
 <211> 16
 <212> PRT
 <213> *Conus purpurascens*

<400> 9
 Gly Cys Cys Ser Leu Pro Pro Cys Ala Ala Asn Asn Pro Asp Tyr Cys
 1 5 10 15

<210> 10
 <211> 16
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: A10L derivative
 of *C. purpurascens* PnIA

<400> 10
 Gly Cys Cys Ser Leu Pro Pro Cys Ala Leu Asn Asn Pro Asp Tyr Cys
 1 5 10 15

<210> 11
 <211> 16
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: N11S derivative
 of *C. purpurascens* PnIA

<400> 11
 Gly Cys Cys Ser Leu Pro Pro Cys Ala Ala Ser Asn Pro Asp Tyr Cys
 1 5 10 15

<210> 12
 <211> 16
 <212> PRT
 <213> *Conus purpurascens*

<400> 12

4

Gly Cys Cys Ser Leu Pro Pro Cys Ala Leu Ser Asn Pro Asp Tyr Cys
1 5 10 15

<210> 13

<211> 12

<212> PRT

<213> *Conus imperialis*

<400> 13

Gly Cys Cys Ser Asp Pro Arg Cys Ala Trp Arg Cys
1 5 10